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DISCOVERY
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Extended distribution of *Cyanotis vaga* (Lour.) Schult. & Schult.f. (Commelinaceae) –from Western Ghats of Southern India

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ABSTRACT

Cyanotis vaga of Commelinaceae is reported here as a new addition to the Flora of Southern India collected from Mahendragiri hills, Thirunelveli district of Tamil Nadu, Southern Western Ghats. The detailed description and colour images are provided for easy identification.

Keyword: Commelinaceae, *Cyanotis*, Mahendragiri hills, Southern India, Tamil Nadu, Tirunelveli

1. INTRODUCTION

The *Cyanotis* D. Don is a paleotropical genus represented by 50 species with rich diversity in Asia and Africa (Faden, 2000; Mabberley, 2008; POWO, 2022). In India, the genus is represented by 13 species and 2 varieties, of which 5 are endemic (Mayur & Gurav, 2014). Meanwhile Narasimhan and Sheeba (2021) compiled 16 species of *Cyanotis* for the state Tamil Nadu.

During the month of September 2013 medicinal plant inventory at Mahendragiri hills, Thirunelveli district of Tamil Nadu State, Southern Western Ghats an interesting *Cyanotis* was collected which looks like *C. tuberosa* but base of the plant is bulbous and the roots are not tuberous. On perusal of literature (Hasskarl, 1870; Hooker, 1894; Faden, 1998; Faden, 2000) and critical examination it was identified as *Cyanotis vaga* (Lour.) Schult. & Schult.f. The identity was further confirmed by referring Acharya (2009) and Zhengyi & Raven (2000), consulting the Kew database (<http://apps.kew.org/efloras/key>) and (GBIF) Global Biodiversity Information Facility <https://www.gbif.org/species/5303311>. From Asia, this species is recorded so far from Bhutan, India, Taiwan, Nepal, Yunnan, Laos, and Myanmar (Mayur et al., (2014). In India it is reported from the states of Arunachal Pradesh, Assam, Himachal Pradesh, Meghalaya, Sikkim and Uttarakhand (Mao and Dash, 2020). By referring the recent literatures of Peninsular India (Narasimhan & Irwin 2021, Ravikumar et al., 2021) found that this species was not reported. Whereas Pullaiah and Karuppusamy (2020)

recorded the occurrence from Mahendragiri hills of Orissa (now as Odissa), Eastern Ghats but most of the given characters are not matching with the (iso) type specimen (K000433061, K000433062). The present collection therefore forms a new distributional record for the flora of Southern India, Western Ghats and to the state Tamil Nadu. A detailed description and relevant information are provided for identification of the species.

TAXONOMY DESCRIPTION

Cyanotis vaga (Lour.) Schult and Schult f in Roem. and Schult. Syst Veg 7: 1153. Merrill in Trans. Amer Phil Soc 1830; 24(2): 102.1935. (Fig. 1).



Figure 1 *Cyanotis vaga* (Lour.) Schult and Schult.f. A. Type specimen B. Voucher specimens; C. Close-up of the flowers; D. Close-up of the bulbiferous.

Tradescantia vaga Lour, Fl Coch. 1: 239.1790.

Cyanotis barbata D. Don, Prodr Fl Nepal 46. Hook f, Fl Brit India 1825; 6: 385. 1894.

Perennial herb, base bulbiferous. Leaves all cauline; leaf blade linear to lanceolate, 10-18 cm long, 10-15 mm wide, glabrous at adaxial, sparsely pubescent at abaxial. Inflorescence stalk usually from base, solitary or few branches at the top, to 40 cm high. Cincinni, terminal, solitary-few; bracts 5-30 mm long. Sepals connate at base, oblanceolate to oblong, 0.4-0.6×0.2 cm, pilose or glabrous. Petals blue-purple or violet; c.8 mm, stamen filaments with sub-apical swelling, densely bearded with blue to purple moniliform hairy, anthers yellow. Capsule obovoid, trigonous, c. 2.5 mm, hirsutulous at apex. Seeds gray-brown, striate and finely reticulate.

Flowering and fruiting: August – December

Global Distribution: Tropical Africa, SW Arabian Peninsula, Himalaya to W. Malaysia.

Indian Distribution: Arunachal Pradesh, Assam, Himachal Pradesh, Meghalaya, Sikkim, Uttarakhand and now from Tamil Nadu.

Ecology: Rare in disturbed and forest floor of tea estates; growing with *Cyanotis fasciculata*, *Camellia sinensis*, *Lantana camera*, *Impatiens flaccida* Arn and *Chromolaena odorata*

Specimens examined: India, Tamil Nadu, Mahendragiri hills, 8.456115 N, 77.403865 E, Tirunelveli, 29th August 2019, N. Balachndran (HIFP 27634).

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Authors Contribution

All authors have contributed equally to manuscript.

Ethical approval

Cyanotis vaga (lour.) Schult. & schult.f. (commelinaceae) from Western Ghats of Southern India were observed in the work. The ethical guidelines for plants & plant materials are followed in the study for sample collection & identification.

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Conflicts of interests

The authors declare that there are no conflicts of interests.

Data and materials availability

All data associated with this study are present in the paper.

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